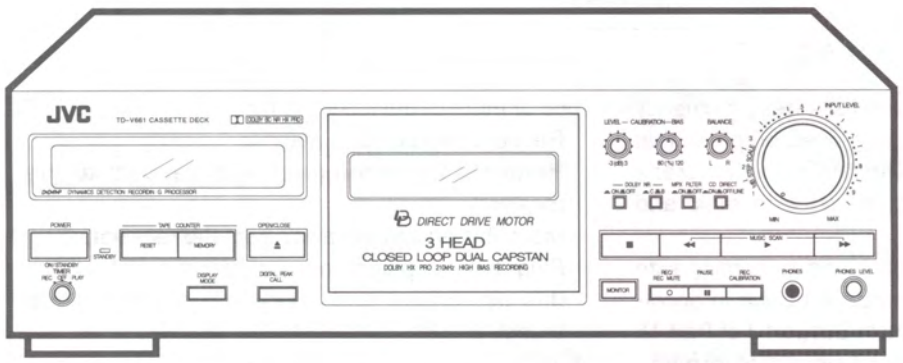
JVC

INSTRUCTIONS

TD-V661/V662 A/B/J

CASSETTE DECK

COMPU LINK
Component



JULY 1994

For Customer Use:

Enter below the Model No. and Serial No. which are located on the rear of the cabinet. Retain this information for future reference.

Model No. TD-V661

Serial No.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING:
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

THIS UNIT IS PRODUCED TO COMPLY WITH DIRECTIVE 76/889/EEC.

IMPORTANT (In the United Kingdom)

Mains Supply (AC 240 V~, 50 Hz only)

DO NOT cut off the mains plug from this equipment. If the plug fitted is not suitable for the power points in your home or the cable is too short to reach a power point, then obtain an appropriate safety approved extension lead or consult your dealer.

BE SURE to replace the fuse only with an identical approved type, as originally fitted and to replace the fuse cover.

If nonetheless the mains plug is cut off ensure to remove the fuse and dispose of the plug immediately, to avoid a possible shock hazard by inadvertent connection to the mains supply.

DO NOT make any connection to the terminal which is marked with the letter E or by the safety earth symbol or coloured green or green-and-yellow.

The wires in the mains lead on this product are coloured in accordance with the following code:

Blue to N (Neutral) or Black

Brown to L (Live) or Red

As these colours may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

IF IN DOUBT-CONSULT A COMPETENT ELECTRICIAN.

Please study this instruction manual carefully before starting to operate the unit, in order to use the unit correctly. We take no responsibility for any problems resulting from misuse of this unit by operating this equipment other than instructed in this manual.

WARNING (In the United Kingdom)

Pre-recorded tapes, records or discs should be re-recorded without the consent of the owners of copyright in the sound recording and in any copyright musical or literary work embodied in that recording as this constitutes an infringement of copyright.

INFORMATION (FOR U.S.A.)

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception.

It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient the receiving antenna;

Relocate this equipment with respect to the receiver;

Move this equipment away from the receiver;

Plug this equipment into a different outlet so that this equipment and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions.

The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio-TV Interference Problems". This booklet is available from the US Government Printing Office, Washington, D.C., 20402, Stock No. 004-000-00345-4.

INTRODUCTION

Thank you for purchasing JVC product. Read this instruction book carefully before operating to be sure of getting optimum performance and longer service life from the unit.

CONTENTS

The only difference between models TD-V661 and TD-V662 is cosmetic one.

FEATURES

1. **Pure and direct design with 3-head combination mechanism**
   - Closed-loop dual-capstan mechanism
   - Pulse servo capstan D.D. (direct drive) system
   - METAPERM combination (rec + play) head and 2-gap ferrite erase head
   - PCOCC (Pure Copper by Ohno Continuous Casting) head winding wire for the superior signal transmission
   - 2 pairs of line input jacks including CD direct input
   - High bias frequency of 210 kHz for improved recording
2. **Electrically driven cassette holder**
3. **Dolby* HX PRO headroom extension**
4. **Dolby B/C noise reduction systems provided for recording and playback independently**
5. **Calibration function for according to the characteristics of individual tapes**
   - Recording bias and level can be adjusted (built-in oscillator).
6. **Multi music scan mechanism for either direction**
   "Under License of Staar S.A., Brussels, Belgium"
7. **Timer start mechanism**
8. **DDRP (Dynamics Detection Recording Processor) —**
   With the DDRP function, the recording level is adjusted automatically so that recording is performed in optimum condition.
9. **COMPU LINK-3/SYNCHRO terminal**
10. **Other features**
    - 2-color fluorescent peak level indicator
    - Digital peak/peak level meter (with peak hold function)
    - 4-digit linear counter
    - Auto monitor
    - Auto tape select mechanism
    - MPX filter switch
    - Headphone volume control

COMPU LINK
Control System

COMPU LINK control system is the convenient system using COMPU LINK-3 / SYNCHRO terminals on the rear panel. (See page 4 and 10.)

D·D·R·P
DYNAMICS DETECTION RECORDING PROCESSOR

This product can be combinated with a DDRP (DYNAMICS DETECTION RECORDING PROCESSOR) system (compact disc player + cassette deck, etc.) to enable setting the optimum recording level automatically. Refer to these instructions for details.

* Dolby noise reduction and HX Pro headroom extension manufactured under license from Dolby Laboratories Licensing Corporation. HX Pro originated by Bang & Olufsen.
* "Dolby", the double-D symbol ⧈ and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.

CAUTIONS

1. **Prevention of Electric Shocks, Fire Hazards and Damage**

1) Even when the POWER switch is set to STANDBY, a very small current will flow. To save power and for safety when not using the unit for an extended period of time, disconnect the power cord from the household AC outlet.
2) Do not handle the power cord with wet hands.
3) When unplugging from the wall outlet, always grasp and pull the plug, not the power cord.
4) Consult your nearest dealer when damage, disconnection, or contact failure is found with the cord.
5) Do not bend the cord sharply, or pull or twist it.
6) Do not modify the power cord in any manner.
7) Do not remove screws to disassemble the unit and do not touch anything inside the unit.
8) AC power cord **(For U.S.A. version only)**
   The AC power cord of this unit has certain one-way direction connections to prevent electric shock. Refer to the illustration for correct connection. (Fig. 1)

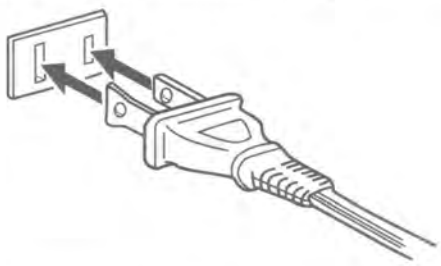


Fig. 1

9) Do not insert any metallic objects into the unit.
10) Unplug the power cord when there is a possibility of lightning.
11) If water gets inside the unit, unplug the power cord from the outlet and consult your dealer.
12) Do not block the ventilation holes of the unit so that heat can escape. Do not install the unit in a badly ventilated place.
13) Be sure to unplug the power cord from the outlet when going out or when the unit is not in use for an extended period of time.

2. Installation

1) Avoid placing the unit on or adjacent to an amplifier, to prevent hum from being produced by some types of amplifiers. Move the unit to a place not affected by the amplifier. Keep the unit as far as possible from a TV set.
2) Avoid installing the unit in a location subject to ambient temperatures exceeding 40°C (104°F) (e.g. direct sunlight, near heaters, etc.) or less than 0°C (32°F), excessive humidity, dust or vibrations.
3) If this set is moved suddenly from a cold place (0°C) to a warm place, it may not function properly because of moisture generated inside the unit. The unit will function properly 30 minutes after being moved.

3. Cleaning the cabinet

Never use benzine or thinner for cabinet cleaning as they may damage the surface finish.

4. Cassette tape

1) Loose tape may become tangled in the tape transport mechanism. Remove slack by winding the tape with a pencil. (Fig. 2)

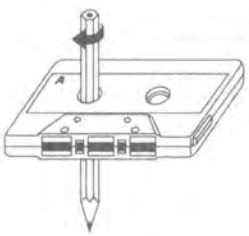


Fig. 2

Turn the pencil to tighten the tape.

2) The use of C-120 (120 minutes turn around) or thinner tape is not recommended, since characteristic deterioration may occur.
3) To prevent recordings from being erased accidentally, remove the tab (s) with a screwdriver. Reseal the slots with adhesive tape to erase and re-record after the tabs have been broken off.

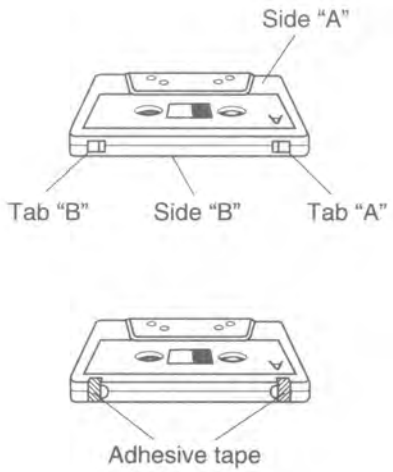


Fig. 3

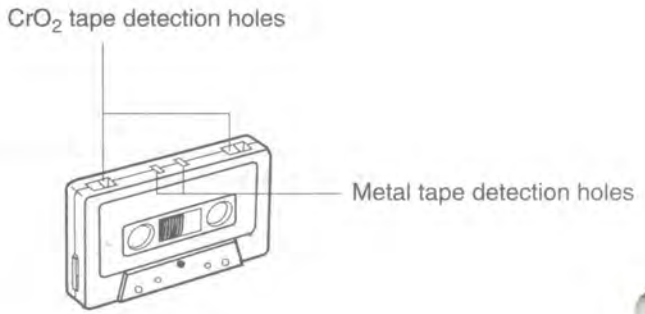
4) Do not store cassette tapes where there is a magnetic field (e.g. near a TV, etc.) or in a place subject to high temperatures or humidity.

5. Auto tape select mechanism

This deck has an Auto Tape Select mechanism which distinguishes between different types of tape from holes in the cassette. After the type of tape has been detected, bias and equalization are set to be suitable for the tape.

- Cassettes with the detection holes:
  Metal tape (EQ: 70μs).....Type IV
  CrO_2(chrome) tape (EQ: 70μs) .....Type II
- Cassettes without the detection holes:
  Normal tape (EQ: 120μs) .....Type I

Some earlier types of metal and CrO_2 (chrome) tapes may not be provided with the detection holes. Avoid using such tapes, since correct equalization characteristics cannot be obtained. Also do not use ferrichrome tapes whose characteristics do not match this unit.



6. Operations

1) When the power cord is pulled out with the deck set to the playback or record mode, noise may be generated. Before pulling out the power cord, confirm that the ■ (stop) button has been pressed.
2) Many operations of this unit are performed under the control of a microcomputer. Use the unit only after carefully studying the descriptions and cautions in each item. If operations are done incorrectly, the unit may stop functioning correctly. If this happens, pull out the power cord once, and after a while plug it in again, so that the unit can function correctly.

CONNECTIONS

1. Connection to a stereo amplifier

- Do not switch the power on until all the connections are completed.
- Insert the plugs firmly, or poor contact will result, causing noise.
- When the pin-plug cords are employed, always connect the white plug to the left channel terminal. This helps to avoid reversed connections.
- When using the Compu Link Control System version 3, do not connect the power cord to the SWITCHED AC OUTLET of an amplifier or receiver. Otherwise, the automatic power on/off (STANDBY) function cannot be carried out.

Note:

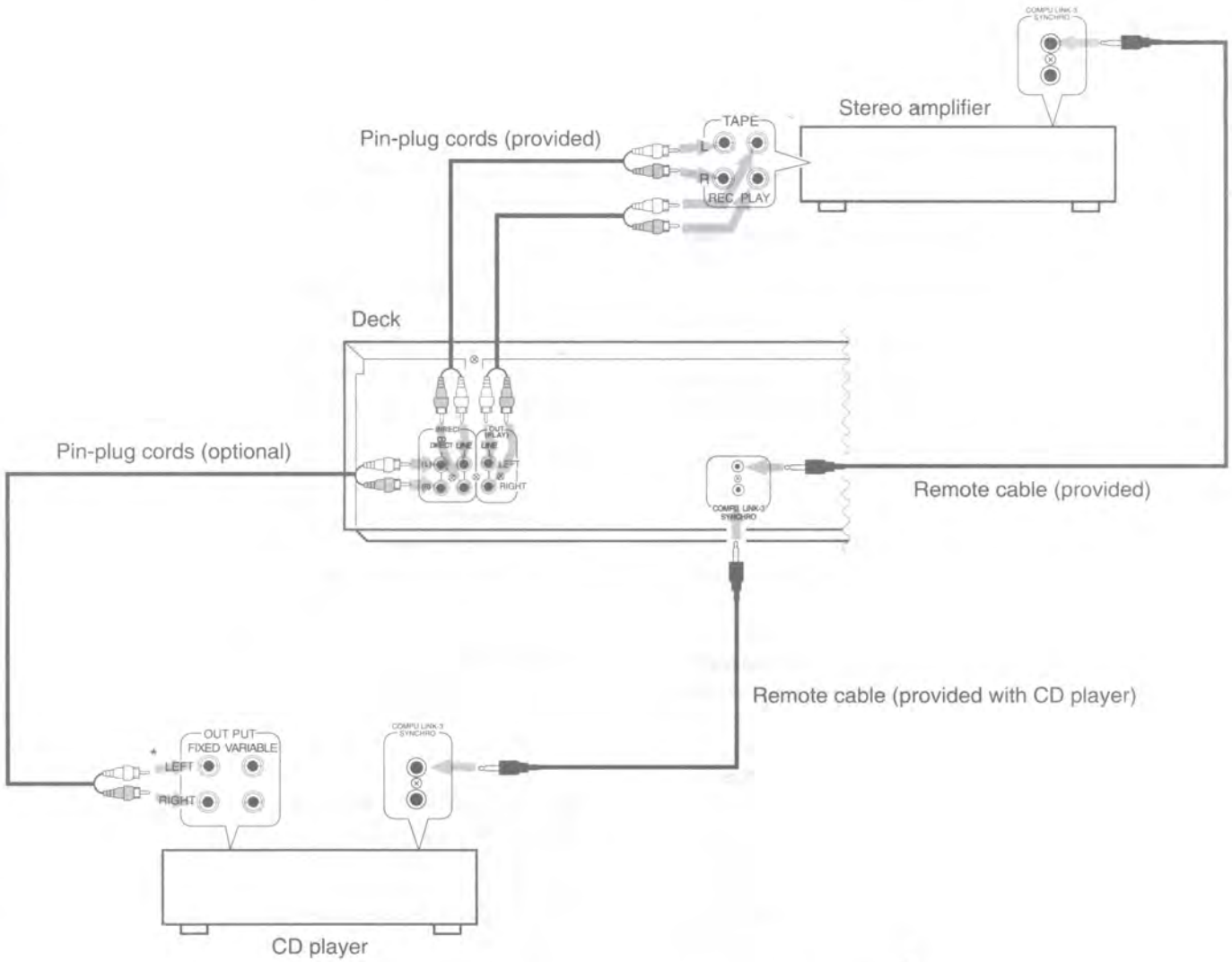
When installing the deck, be sure to install at a distance from your amplifier. If they are stacked, noise (hum) may occur.

2. Remote cable connection for COMPU LINK

- By connecting a remote cable, COMPU LINK functions (automatic power on/off (STANDBY), automatic source selection, synchronized recording and DDRP recording) can be performed. In this time the provided pin-plug cords must be also connected.
- When making synchronized recording with a CD player, connect the remote cable to the COMPU LINK-1/SYNCHRO or COMPU LINK-3/SYNCHRO jacks.

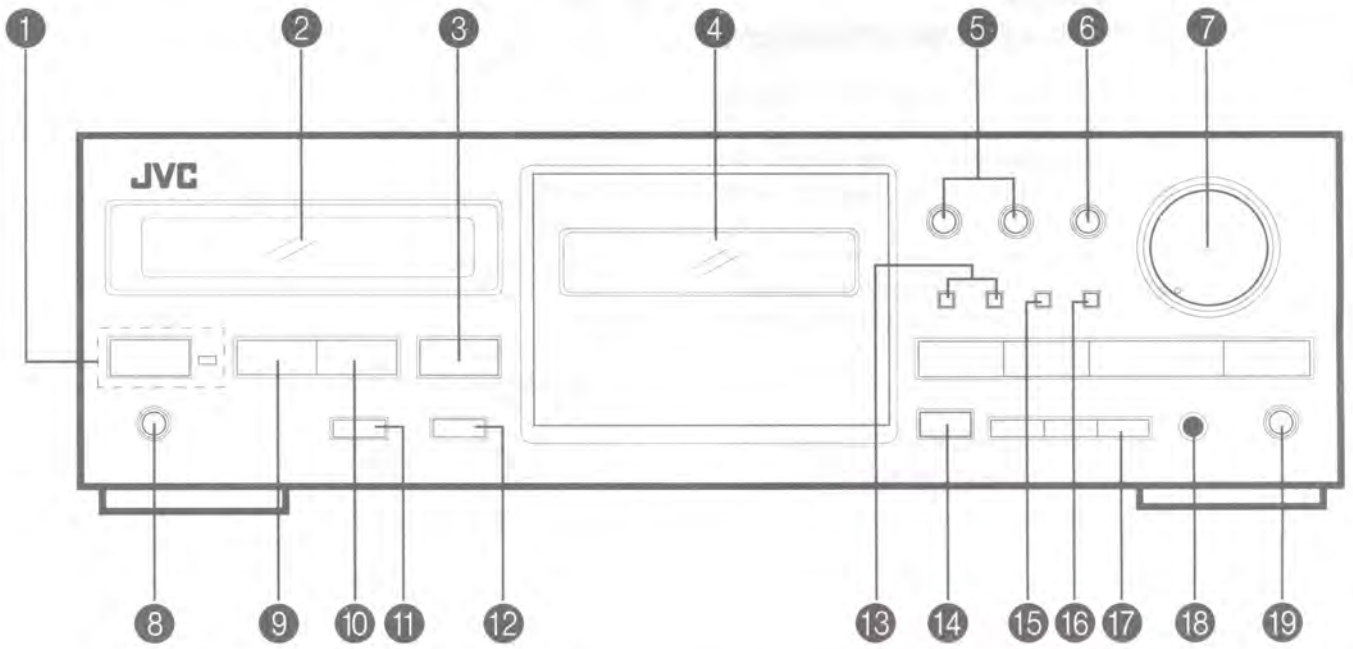
Notes:

1. When making synchronized recordings, only a single deck should be connected to the amplifier.
2. If a component is not a JVC COMPU LINK component, bypass it when making the remote cable connections.
3. This deck can be connected with an amplifier and a CD player which have the COMPU LINK-1/SYNCHRO jacks for COMPU LINK performance.(see page 10 for detail)



* When making DDRP recording connect pin-plug cords with the terminals "VARIABLE".

NAMES OF PARTS AND THEIR FUNCTIONS



❶ POWER switch and STANDBY indicator

❷ Multi mode display

① CALIBRATION indicator

② Peak level meter

These indicators light according to the level of the signal being recorded or the level of the signal recorded on the tape.

0 dB : IEC (DIN) STANDARD LEVEL (250 nWb/m)

0 VU : Signal level at 160 nWb/m

DD : DOLBY NR STANDARD LEVEL

③ MEMORY indicator

④ Tape counter/Digital peak indicator

This functions as a tape counter or digital peak indicator according to the setting of the DISPLAY MODE button.

⑤ DDRP indicator

⑥ Monitor indicator

⑦ Mechanism mode indicators

⑧ Tape types and recording guide indicators

⑨ HX PRO indicator

❸ ▲ OPEN/CLOSE button

❹ Cassette holder

❺ CALIBRATION controls

To adjust the recording bias and sensitivity according to the tape to be used. If adjustment is not performed, set to the center position. (See page 9.)

❻ BALANCE control

Adjusts the balance between the signals input via the left and right LINE IN jacks.

❼ INPUT LEVEL control

Adjust the recording level with this control. (See page 8.)

❽ TIMER switch

When an optional timer is used, recording and playback can be performed at any desired time. (See page 11.)

❾ RESET button

Press to reset the counter to "0.00" and to clear the memory mode.

❿ MEMORY button

Use this button stop the tape automatically at the position which the tape counter is "0.00" in either rewind or fast forward mode. (See page 6.)

⓫ DISPLAY MODE button

Use this button to change the mode between "tape counter" and "digital peak".

⓬ DIGITAL PEAK CALL button

Press to call up the stored (memorized) maximum value or to reset the memory in the digital peak mode. (See page 8.)

⓭ DOLBY NR switches

Set to B or C for recording using the Dolby NR system or for playing back a tape that was recorded using the Dolby NR system.

⓮ MONITOR button

When this button is pressed, it changes between source monitoring and tape monitoring.

⓯ MPX FILTER switch

When an FM stereo broadcast is to be recorded using Dolby NR, set this to ON to prevent the Dolby NR circuit from malfunctioning (otherwise the sound quality could deteriorate.)

⓰ CD DIRECT switch

ON : Set to ON when selecting the CD DIRECT input mode.

OFF/LINE : Set to OFF/LINE when recording from a stereo amplifier.

⓱ CALIBRATION button (See page 9.)

⓲ PHONES jack

Connect headphones (with an impedance of 8Ω to 1 kΩ).

⓳ PHONES LEVEL control

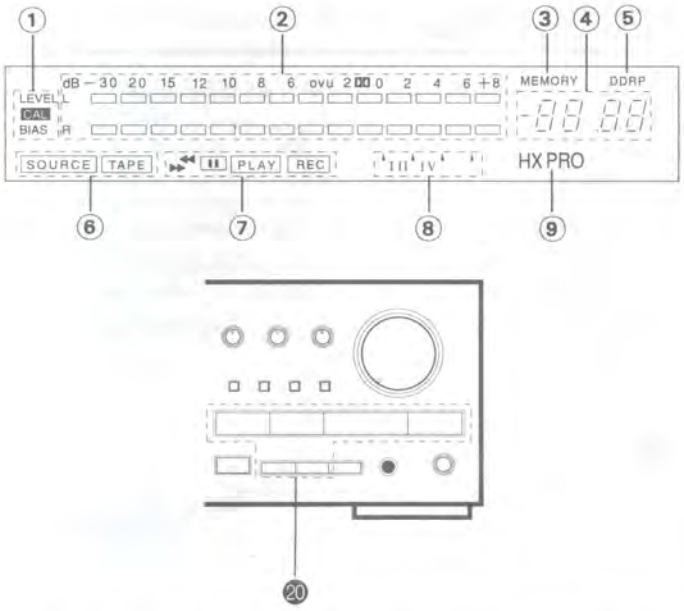
⓴ Cassette operation buttons

■ (stop) : Press to stop the tape.

◄◄ (rewind) : Press to rewind the tape.

► (play) : Press to start recording or playback.

►► (fast forward) : Press to fast forward the tape.



O REC/REC MUTE : Press the ► (play) button while pressing this button to start recording, and press to leave an appropriate non-recorded section. (See page 7.)

II PAUSE : Press to stop the tape temporarily during recording and playback.
Press the ► (play) button to release the pause mode.
When pressed together with the O REC/REC MUTE before recording, the unit will enter the record-pause mode.

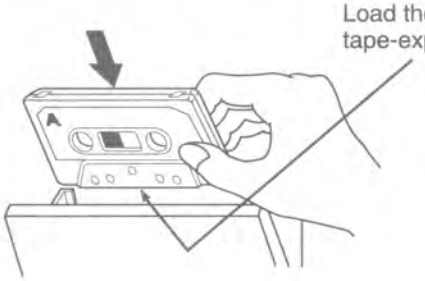
CASSETTE LOADING

(With the POWER switch set to STANDBY.)

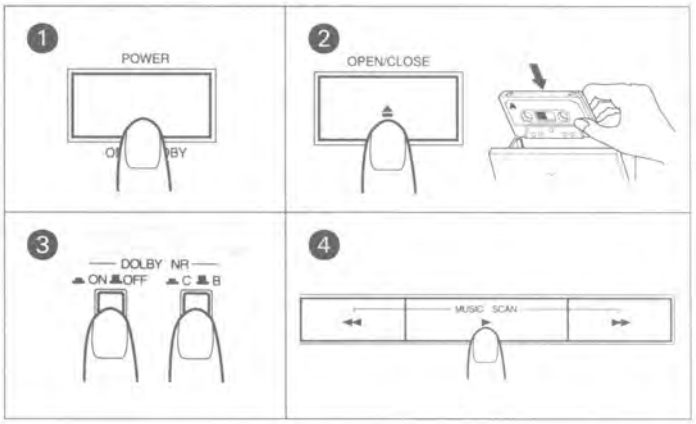
1. Press the ▲ OPEN/CLOSE button to open the cassette holder.
2. Load a cassette as shown.
3. Press the ▲ OPEN/CLOSE button to close the cassette holder.
   - It can also be closed by pushing the cassette holder.
   - After pressing the ► (play) button, closing the cassette holder, playback begins immediately.

Note:

- When the ► (play) or II PAUSE button is pressed instead of pressing the ▲ OPEN/CLOSE button, the cassette holder closes automatically and the operation corresponding to the pressed button is performed.



PLAYBACK



Operate in the order of the numbers in the illustration.

1. Press the POWER switch to set to ON .
2. Load a prerecorded cassette.
3. Press the same DOLBY NR switches that were pressed when the tape was recorded.
4. Press the ► (play) button to start playback.

- When the deck contains a tape, the deck is turned on automatically and the tape is played back by only pressing the ► (play) button.
- It changes to the tape monitor mode automatically and "TAPE" will appear on the display.
- To stop playing back midway ..... Press ■ (stop) button.

Tape counter display

When the power is turned on, the counter value which the POWER switch was set to STANDBY, appears on the display. When the tape runs, the counter functions as a 4 digit linear tape counter. The running time is displayed in minutes and seconds (countdown function included). Since the counter is not a clock, there may be a discrepancy between the actual recording and playback times. This discrepancy will vary depending on the length of the tape and the hub diameter.

To set the counter to "0.00".

Press the RESET button.

MEMORY BUTTON

Memory function operates at the point where the tape counter is "0.00". Press the RESET button to set the counter to "0.00" at the point to which you want the tape to be rewound and from which you want to listen to during recording or playback.

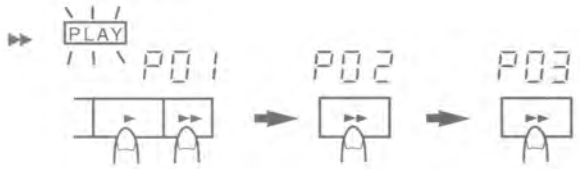
The tape stops automatically at the point where the counter is "0.00" in either the fast forward or rewind mode.

- The point where the counter is "0.00" is stored during any mode (recording, playback or stop), but the memory function (automatic stop) operates only in the fast forward or rewind mode.
- If pressing the MEMORY button again, the memory will be cleared. It will also be cleared if pressed the RESET button and reset the counter to "0.00".

MULTI MUSIC SCAN

- The multi music scan mechanism of this unit allows you to quickly locate the beginning of a specific tune (up to 99 tunes before or after the current tune).

- Fast forward scan



- Rewind scan

Procedure

1. Press the ► (play) and ◄◄ (or ►►) buttons simultaneously.
2. When more than 2 tunes are to be skipped, after procedure 1 press the ►► (or ◄◄) button the number of times you want to skip tunes. The number of tunes to be skipped is displayed in the counter.

Notes:

In the following cases, the mechanism may not operate correctly. This is not a malfunction; use the mechanism according to the type of program.

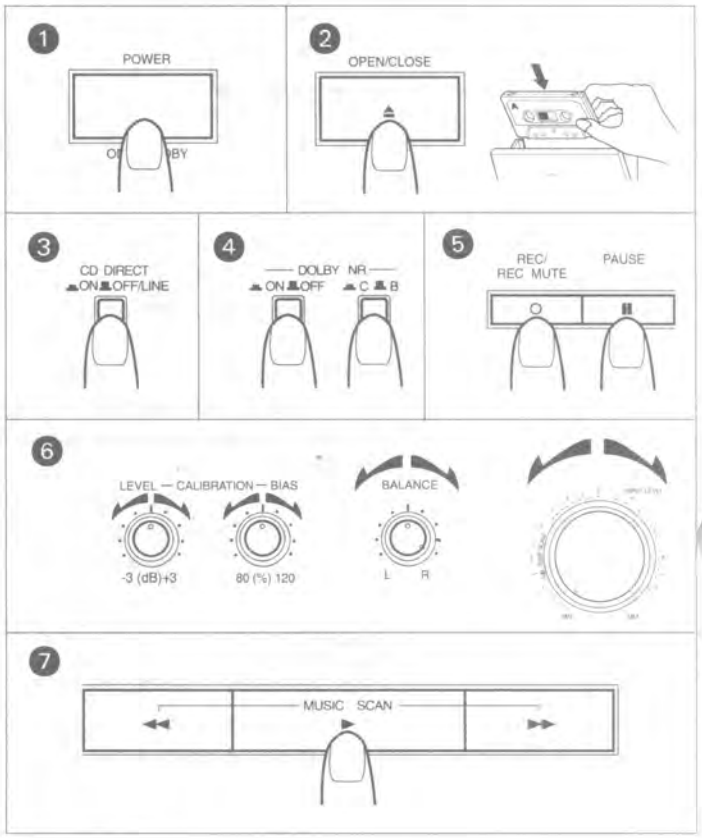
- Tapes with tunes having long pianissimo passages (very quiet parts) or non-recorded portions during tunes.
- Tapes with short non-recorded sections.

RECORDING

Operate in the order of the numbers in the illustration.

- Make sure the safety tab of the cassette has not been broken off.

It should be noted that it may be unlawful to re-record prerecorded tapes, records, or discs without the consent of the owner of copyright in the sound or video recording, broadcast or cable programme and in any literary, dramatic, musical, or artistic work embodied therein.



Manual recording

1. Press the POWER switch to set to ON.
2. Load a cassette for recording.
3. Select the recording input.
4. Set the DOLBY NR switch as required.
5. Press the ▮▮ PAUSE button and O REC/REC MUTE button (record-pause mode).
   The ▮▮ and REC indicators light.
6. Adjust the recording level, bias and balance.
   (See pages 8 & 9.)
   The BALANCE control only works with line input.
7. Press the ► (play) button to start recording.

DDRP (Dynamics Detection Recording Processor) recording

- DDRP recording is performed with suitable JVC CD players and the recording level adjustment is performed automatically.
- Since recording level adjustment is performed automatically for different types of tape (normal, CrO_2 and metal), the adjustment of INPUT LEVEL and BALANCE controls are not required.
- Read the instruction book of your CD player carefully.

DOLBY NR and DOLBY HX PRO

Dolby NR System

To reduce the hiss inherent in tape recording, use the Dolby NR System when making recordings. When listening to a tape recorded with the Dolby NR System, set the DOLBY NR switch to B or C according to the system selected in the recording mode.

Note:

The sound quality will change if the positions of the DOLBY NR switch are different in recording and playback.

Dolby HX PRO headroom extension

When a source which contains many high-frequency components is recorded, these high-frequency signals have the same function as bias and therefore, the effective bias current changes.
This will result in phenomena such as changes in the level of low-frequency signal and subsequent distortion and reduction of the high-frequency saturation level.
Dolby HX PRO headroom extension system controls the bias current so that the effective bias is constant even when there are fluctuations in the high-frequency components of the input signal.
This greatly improves the high-frequency saturation level while reducing the low-frequency signal level variations and distortion.

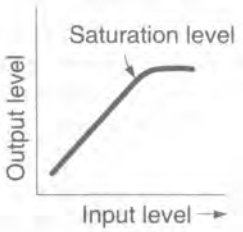
- The dynamic sound recorded with this system sounds the same even when the tape is played back in a deck that does not have Dolby HX PRO.
- This system automatically works when in recording; however, Dolby HX PRO is not a noise reduction system.

RECORDING LEVEL ADJUSTMENT

It is best to adjust so that the maximum sound level of the source to be recorded reaches the very limit of the saturation level of the tape to be used.

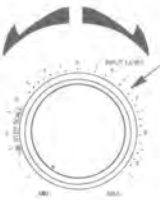
- When the recording level is too low, the hiss noise inherent in the tape will be conspicuous.
- When the recording level is too high, exceeding the saturation level, the recording will contain cracking noise and will be distorted.

- **Saturation level means:**
  When the recording input is increased gradually, the output increases proportionally. However, once it reaches a certain level, the output cannot increase any further. Moreover, the output will be distorted if the input is increased beyond this point. The level at which this occurs is called the tape's "saturation level".



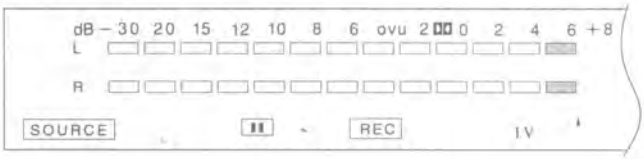
How to adjust the recording level

① Set to the source mode (record-pause).
② Adjust the recording level using the INPUT LEVEL control.



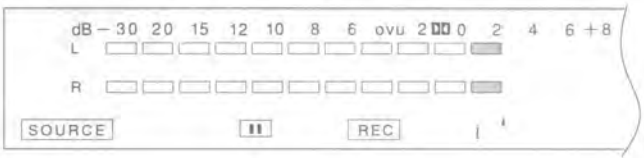
With Type IV (metal) tape

Because of metal tape's higher saturation level, it is OK that "+ 6" lights occasionally.



With Type I (normal) or Type II (chrome) tape

It is OK that "+ 2" lights occasionally.



Digital Peak Indicator

This is a digital display that shows the recording/playback level and is interlocked with the peak level meter under the control of the meter microcomputer. A maximum peak level memory function is provided so that the peak level can be checked after as well as during recording.

For 0 dB and under: 0

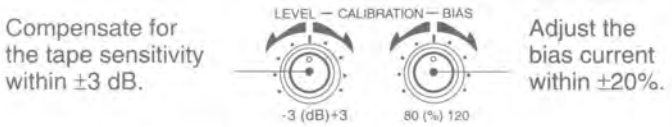
For +8 dB and over: 8

Calling up the maximum level and resetting the memory

When the "DIGITAL PEAK CALL" button is pressed once, the peak level held in memory flickers in the display for approximately 5 seconds. If the CALL button is pressed again while the peak value is displayed, the previous contents of memory will be cleared and this newly input maximum level will be held in memory as the peak level.
In addition, the digital peak function holds the level of whichever of the left or right channels is the higher and displays it.

CALIBRATION OPERATION

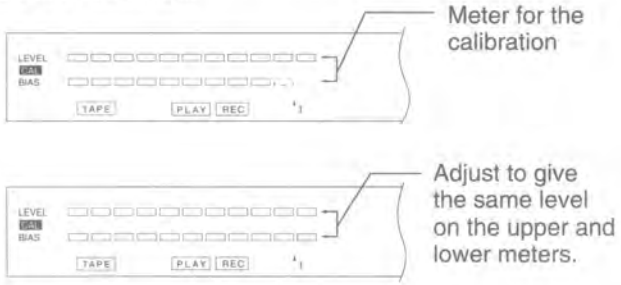
There are various types of cassette tapes, and their characteristics differ slightly even when they are of the same type.
Generally, the bias current and equalization characteristics suitable for the type of tape being used can be obtained by the Auto Tape Select system.
However, to optimize the response of the tape to be used, it is better to adjust the recording bias so that distortion is minimized and the frequency characteristics are as flat as possible.
When recording using Dolby NR, the recording and playback levels should be matched to achive the best Dolby NR effect.



How to adjust

Adjust the bias current to compensate for the tape sensitivity while recording the test tone.

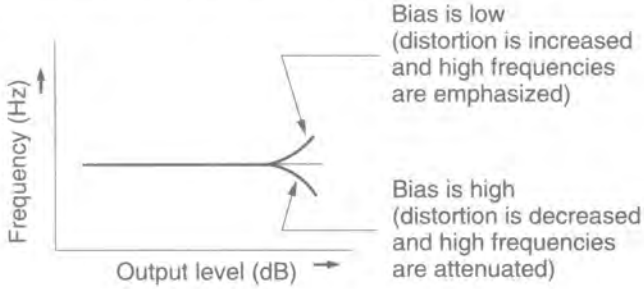
1. Press the ► button while pressing the CALIBRATION button. The meter changes to calibration mode and the test tone is recorded.
2. Adjust the BIAS control so that the upper and lower meters show the same level.



3. Adjust the LEVEL control that the upper and lower meters meat "▲".

4. Press the ■ (stop) button to stop the tape.
   The level meter works when the ■ (stop) button is pressed. This is not a malfunction.

The optimum bias is set and the tape sensitivity is compensated for by the above procedures. To start recording, rewind the tape and erase the test tone.(See the following "Erasing".)
When the bias is low (80% position) or high (120% position), the frequency response is as shown in the following diagram.



Notes:

- When using Type IV (metal) tape, the change in the frequency characteristic when the bias control is adjusted is small compared with the change when using Type I (normal)- or Type II (high position) tape. The optimum bias may not be obtained within adjusting range (±20%) of this deck due to tape characteristic difference.
- During calibration, monitoring is impossible regardless of whether the monitor mode is set to "tape" or "source".

Erasing

When recording on a prerecorded tape, the previous recording is automatically erased and only the new program is recorded on the tape.

To erase a tape without making a new recording...

Follow the section "RECORDING" but in step ❻, set the INPUT LEVEL control to MIN.

AUTOMATIC RECORD MUTING

This facility is used to eliminate undesired sections and leave an appropriate non-recorded section.

A. To leave non-recorded sections of about 4-5 seconds automatically

❶ When the undesired section comes during recording, press the O REC/REC MUTE button and release it.
❷ The REC indicator flashes and a non-recorded section is made during record muting operation.
About 4-5 seconds later, the tape automatically stops, and the unit enters the record-pause mode.
❸ Press the ► (play) button to restart recording.

B. To leave non-recorded sections of more than 4-5 seconds

❶ Keep the O REC/REC MUTE button pressed continuously as long as you want to make a non-recorded section. By releasing the finger from the button after the above operation, the unit enters the record-pause mode.
❷ Press the ► (play) button to restart recording.

C. To leave non-recorded section of less than 4 seconds

- When the undesired section comes during recording....
  After the O REC/REC MUTE button is pressed, press the ► (play) button before the unit enters the pause mode to start recording again, or press the ❚❚ PAUSE button to enter the record-pause mode.
- The PEAK LEVEL INDICATOR lights even during record muting according to the input level which can be heard from the speakers or headphones so that recording can be resumed at the exact point on the tape.

MONITOR BUTTON

Since the unit is a three-head deck with separate record, play and erase heads, the sound from the source can easily be compared with that recorded on the tape by switching this button.

A. Source monitoring

Press the MONITOR button to indicate "SOURCE" in the display to monitor the sound from the source. The PEAK LEVEL METER and DIGITAL PEAK indicators show the level of the input signal; adjust the recording level while monitoring the source.

B. Tape monitoring

Press the MONITOR button to indicate "TAPE" in the display to monitor the signal picked up by the play head after it has been recorded on the tape. In this way, you can check whether it has deteriorated because of dirt on the head, etc.

This unit automatically enters the source monitor mode when the record-pause mode is engaged, and the tape monitor mode when the record or playback mode is engaged.

CD DIRECT INPUT

When a CD player or other component is connected to the CD DIRECT terminals as shown in "CONNECTIONS" on page 4, a direct signal will be input without passing through the stereo amplifier.

COMPU LINK CONTROL SYSTEM

COMPU LINK
Control System

The Compu Link Control System controls relative operations between components automatically and facilitates various operations.

This is a system originated and developed by JVC for facilitating various system operations. There are two versions of this system; version 1 and 3. (For version 1 components, "COMPU LINK-1 / SYNCHRO" is marked on the rear panel. For version 3 components,"COMPU LINK-3 / SYNCHRO" is marked on the rear panel. This unit belongs to version 3.)

The version 3 system controls relative functions between this unit and an amplifier or receiver, in addition to all of the functions of version 1.

Automatic Power On/Off (STANDBY) Function (COMPU LINK-3)

This function is available when an amplifier or receiver having a COMPU LINK-3/SYNCHRO terminal is connected. For example, if a deck contains a tape, the deck is turned on automatically and the tape is played back by only pressing the ► (play) button. When the amplifier or receiver is switched STANDBY, the source unit is automatically switched STANDBY.

Automatic Source Selection (COMPU LINK -1,3)

When the provided remote cables are used for connecting this unit to other components which have COMPU LINK-1 or 3/SYNCHRO terminals, the switch-over of all system components is possible with simple one-touch of the source selector button of JVC's amplifier or receiver.

By doing this, the corresponding component will start playing automatically.

The source select button of the remote control unit or the activation button of the desired component can be also used for this purpose. When the components have been switched over, the previous component will stop playing within five seconds.

Synchronized Recording (COMPU LINK -1,3)

Synchronized recording refers to the process in which the deck starts recording in synchronism with the CD player. Perform the synchronized recording as follows:

1. Set the cassette deck to the record-pause mode in accordance with the recording procedures on page 7.
2. If you want the programmed recording, program the desired tunes in any order you wish to hear.
3. Press the PLAY/PAUSE button of the CD player. By so doing, the cassette deck is placed in the record mode and synchronized with the CD player for recording. Synchronized recording thus can be made possible.

DDRP (Dynamics Detection Recording Processor) recording

The DDRP function makes possible fully automatic recording when used with a suitable JVC CD player. When the DDRP button of a suitable JVC CD player is pressed, the recording level is first adjusted automatically, then recording starts; it is not necessary to start recording by the normal procedure.

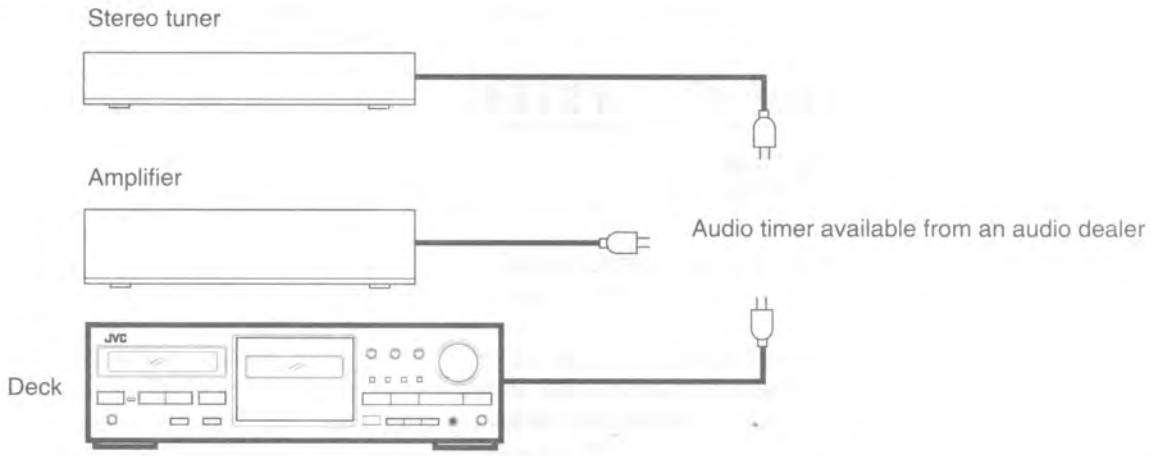
Notes:

- Synchronized recording or DDRP recording stops automatically when the CD player stops playing.
- To cancel synchronized recording or DDRP recording, press the STOP button of the CD player or cassette deck.
- Synchronized recording does not start except when the record-pause mode is set by simultaneously pressing the O REC/REC MUTE and ▮▮ PAUSE buttons in the stop mode.
- The source is locked to the CD position during synchronized recording or DDRP recording to avoid accidental stops or switch-over to another component. To switch over the components, cancel synchronized recording or DDRP recording first.
- The INPUT LEVEL control does not function during DDRP recording.

TIMER RECORDING/PLAYBACK

- Recording or playing back at any desired time can be performed using an audio timer.
- Read the instruction manual of the timer carefully before using it.
- Timer recording cannot be performed if the cassette's safety tabs are removed.

In case the amplifier is not provided with AC outlets, use a multi-plug connecter for each connection.



Procedure	Time recording	Timer playback
1. Timer operation	• Set the timer so that the power of units are switched on.	
2. Amp and tuner operation	• Set the source selector of the amplifier to TUNER. • Tune to the station to be recorded.	• Set to the playback mode. • Adjust the volume and tone of the amplifier.
3. Deck operation	• Load a cassette and perform the recording operations.(See page 7.)	• Load a recorded cassette and perform the playback operations. (See page 6.)
4. Timer operation	• Set the timer to the desired start and stop times. When you are recording, allow about 1 extra minute at the beginning and end of the program to be sure to record everything. • Confirm that the units connected to the timer are turned off.	
5. Deck operation	• Set the TIMER switch to REC. • Recording will start at the time set on the timer. 	• Set the TIMER switch to PLAY. • Playback will start at the time set on the timer. 

- Before starting timer recording, wind the tape beyond the leader section.
- Turn the TIMER switch "OFF" when you finish timer operation.

MAINTENANCE

The importance of cleaning

When the tape is moving, magnetic powder and dust naturally accumulate on the heads, capstan and pinch roller. When they become too dirty,

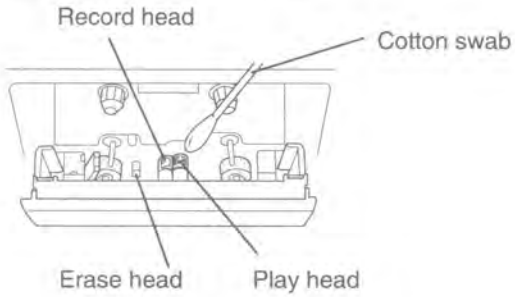
- tone quality deteriorates.
- the output sound level drops.
- the previous sound is not erased satisfactorily.
- recordings are not satisfactory.

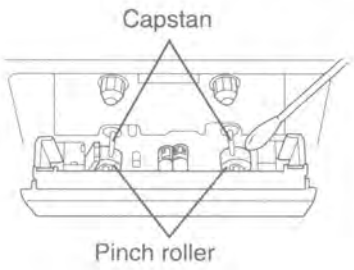
Because of this, clean the heads, etc. every 10 hours of use so that optimum recordings will be made.

Cleaning the heads, pinch roller and capstan

Wipe the heads, the capstan, etc. with a cotton swab with its tip dipped in alcohol.

For effective cleaning, use a cleaning kit available from your audio store. After cleaning, be sure that the cleaning fluid has completely dried before loading a cassette.





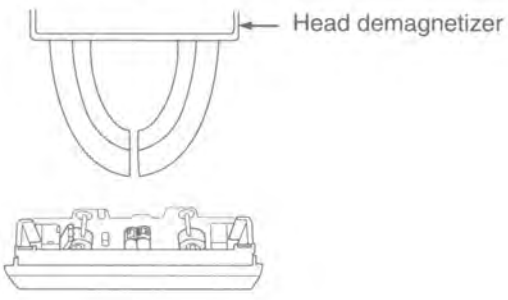
Demagnetizing the heads

Magnetic objects brought close to the head or using the deck for a long period of time, results in magnetization of the head, thus noise occurs. When the noise is excessive, high frequencies on the recorded tape may be erased.

Demagnetize the heads and other metal parts that come into contact with the tape every 20-30 hours of use with a head demagnetizer (available from your audio store).

(When demagnetizing the heads, be sure to set the POWER switch to STANDBY).

Regarding the use of a demagnetizer, see its instructions.



TROUBLESHOOTING

What appears to be trouble is not always real trouble. Make sure first....

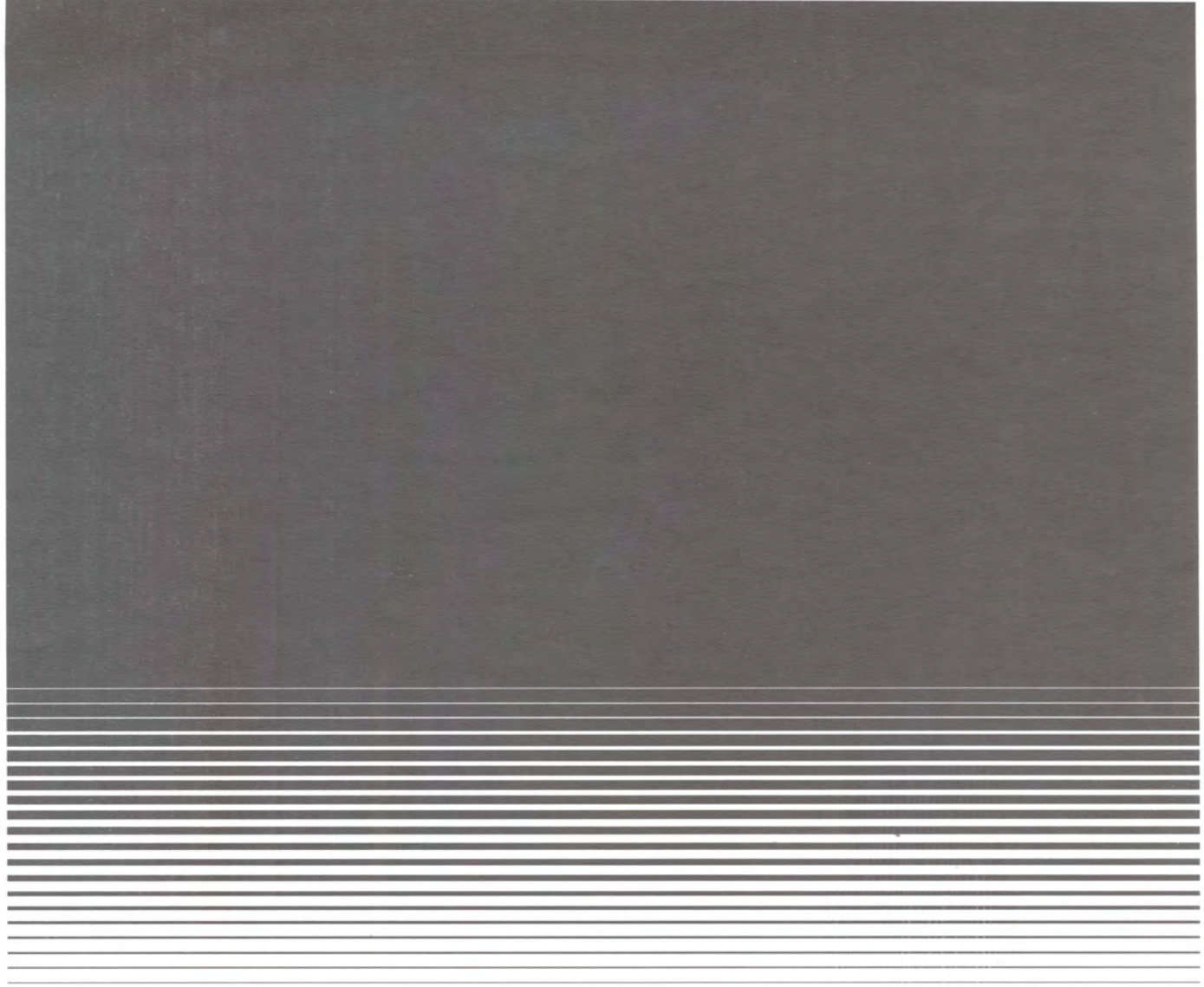
1. **Playback (recording) starts immediately after the power cord is plugged in.**
   - Is the TIMER switch set to PLAY (REC)?
     If so, set the switch to OFF when not performing timer playback (recording).
2. **Recording cannot be performed.**
   - Are the safety tabs of cassette tape broken?
     If so, replace the cassette with a new one, or when the recording can be erased, cover the safety tab slots with adhesive tape.
   - Does the CD DIRECT switch setting correspond to the input?
     If not, press the switch to select the source from which you want to record.
3. **Tape runs, but no sound is heard.**
   - Are the cords connected correctly?
     If not, insert again securely.
   - Is the remote cable disconnected?
     If so, connect it correctly.
   - Is the VOLUME control of the stereo amplifier set to MIN?
     If it is, adjust the control to an appropriate volume.
4. **MUSIC SCAN operation does not function properly.**
   - Are the non-recorded sections too short (3 sec. or less), or do they contain high level noise or hum?
     If so, replace the cassette.
5. **Sound is too low, unstable or broken.**
   - Are the heads, pinch roller and capstan dirty?
     If so, clean them.
6. **Hiss noise is heard, and high-frequencies are attenuated.**
   - Is the record/playback head magnetized?
     If so, demagnetize it.
7. **Previously recording is not completely erased.**
   - Is the erase head dirty?
     If so, clean it.
8. **Sound quality is poor (with no high frequency sound).**
   - Is the DOLBY NR switch set to the right position?
     If not, playback after setting it to the mode used when recorded.
9. **Hum noise is heard.**
   - Is the deck directly on , under or on both sides an amplifier?
     If so, move it away from the amplifier.
10. **Automatic power ON/OFF (STANDBY) system does not function.**
    - Is the power cord of deck connected to the SWITCHED AC OUTLET of an amplifier or receiver?
      If so, connect it correctly.

SPECIFICATIONS

Type : Cassette deck
Track system : 4-track, 2-channel
Tape speed : 4.8 cm/sec (1-7/8 inch/sec)
Frequency response : (–20 dB recording)
Type IV tape ; 10 – 21,000 Hz
15 – 19,000 Hz (±3dB)
Type II tape ; 10 – 19,000 Hz
15 – 17,000 Hz (±3dB)
Type I tape ; 10 – 19,000 Hz
15 – 17,000 Hz (±3dB)
S/N ratio : 59 dB (S = 315 Hz, k3 = 3 %,N = A-weighted, Type IV tape) The S/N is improved by about 15 dB at 500 Hz and by max. 20 dB at 1 kHz to 10 kHz with Dolby C NR on and improved by 5 dB at 1 kHz and by 10 dB at above 5 kHz with DOLBY B NR on.
Improvement of MOL : 4 dB at 10 kHz with Dolby C NR on.
Wow and flutter : 0.035 %(WRMS), ±0.09%(DIN/IEC)
Channel separation : 40 dB (1 kHz)
Crosstalk : 60 dB (1 kHz)
Harmonic distortion : k3; 0.7% (Type IV tape, 315Hz, 0 VU)
Heads : Record (METAPERM: PCOCC winding wire) × 1
Playback (METAPERM: PCOCC winding wire) × 1
Erase (2-Gap Ferrite) × 1
(Combination)

Motors : Pulse servo direct drive motor for capstan × 1
DC motor for reel × 1
DC motor for mechanism drive × 1
Fast forward/
Rewind time : Approx. 100 sec. with C-60 cassette
Input terminals
CD DIRECT (× 1 circuit) : Input sensitivity; 80 mV (0 VU)
Input impedance; 50 kΩ
LINE IN (× 1 circuit) : Input sensitivity; 80 mV (0 VU)
Input Impedance; 50 kΩ
Output terminals
LINE OUT (× 1 circuit) : Output level; 300 mV (0 VU)
Output impedance; 5 kΩ
Matching impedance; 47 kΩ or more
PHONES × 1 : Output level; 0 – 1 mW/8 Ω (0 VU)
Matching impedance; 8 Ω – 1 kΩ
Other terminals : COMPU LINK-3/SYNCHRO × 2
Power requirement : AC 240 V, 50/60 Hz (Australia/U.K.)
AC 120 V, 60 Hz(U.S.A.)
Power consumption : 20 W with power switch ON
5.8 W with power switch STANDBY
Dimensions
(W × H × D) : 435 × 133 × 332 mm
(17-3/16 × 5-1/4 × 13-1/8)
Weight : 5.2 kg (11.5 lbs.)
Accessories : Pin plug cord 2
Remote cable 1

Design and specifications are subject to change without notice.



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